

116TH CONGRESS
2D SESSION

S. 4130

To require the Secretary of Commerce to award grants to States for the construction of microelectronics manufacturing and advanced research and development facilities, to authorize the Secretary of Defense and the Director of National Intelligence to fund the construction of microelectronics manufacturing facilities for national security needs, and to authorize additional amounts for microelectronics research and development, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 1, 2020

Mr. COTTON (for himself, Mr. SCHUMER, Mr. REED, Mr. RISCH, Ms. COLLINS, Mr. KING, Mr. HAWLEY, Mr. JONES, Mrs. GILLIBRAND, Mr. RUBIO, and Ms. HASSAN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To require the Secretary of Commerce to award grants to States for the construction of microelectronics manufacturing and advanced research and development facilities, to authorize the Secretary of Defense and the Director of National Intelligence to fund the construction of microelectronics manufacturing facilities for national security needs, and to authorize additional amounts for microelectronics research and development, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “American Foundries
5 Act of 2020”.

6 **SEC. 2. GRANTS FOR CONSTRUCTION OF MICROELEC-**
7 **TRONICS MANUFACTURING AND RESEARCH**
8 **AND DEVELOPMENT FACILITIES, AND WORK-**
9 **FORCE DEVELOPMENT.**

10 (a) GRANTS FOR STATES WITH DEMONSTRATED IN-
11 TEREST IN CONSTRUCTING MICROELECTRONICS MANU-
12 FACTURING AND ADVANCED RESEARCH AND DEVELOP-
13 MENT FACILITIES.—

14 (1) IN GENERAL.—Not later than 180 days
15 after the date of the enactment of this Act, the Sec-
16 retary of Commerce, in consultation with the Sec-
17 retary of Defense, shall commence carrying out a
18 program on the award of grants to States described
19 in paragraph (2) to assist in financing the construc-
20 tion, expansion, or modernization (including acquisi-
21 tion of equipment and intellectual property) of
22 microelectronics fabrication, assembly, test, ad-
23 vanced packaging, or advanced research and develop-
24 ment facilities.

1 (2) STATES DESCRIBED.—A State described in
2 this paragraph is a State that demonstrates to the
3 Secretary of Commerce the following:

4 (A) Documented interest from a microelec-
5 tronics company, that has a demonstrated abil-
6 ity to build and operate microelectronics fab-
7 rication, assembly, test, advanced packaging, or
8 advanced research and development facilities, in
9 constructing, expanding, or modernizing a com-
10 mercial microelectronics fabrication, assembly,
11 test, advanced packaging, or advanced research
12 and develop facility, or documented interest
13 from a public-private consortium that has a
14 demonstrated ability to build and operate an
15 advanced research and development facility in
16 the State.

17 (B) Documented interest from a private
18 entity to provide funding to support the con-
19 struction, expansion, or modernization of the
20 facility that is the subject of the interest docu-
21 mented under subparagraph (A).

22 (C) Commitments from such microelec-
23 tronics company or consortia to worker and
24 community investment, including—

(i) training and education benefits paid for by the company; and

(ii) programs to expand employment opportunity for economically disadvantaged individuals.

(D) Commitments from regional educational and training entities and institutions of higher education to develop curriculum or engage in workforce training, including programming for training and job placement of economically disadvantaged individuals.

(E) Guaranteed State-level economic incentives for the construction, expansion, or modernization of the facility described in subparagraph (B), such as site development, tax incentives, job-training programs and State-level funding for microelectronics research and development.

(3) LIMITATION ON GRANT AMOUNT.—A State may not be awarded more than \$3,000,000,000 under paragraph (1).

(4) USE OF FUNDS.—

(A) IN GENERAL.—A State receiving a grant under paragraph (1) may only use the amount of the grant to finance—

(i) the construction, expansion, or modernization of a state-of-the-art micro-electronics fabrication, assembly, test, advanced packaging, or advanced research and development facility with respect to which the State demonstrated to the Secretary documented interest under paragraph (2), or for similar uses in state of practice and legacy facilities as deemed necessary by the Secretary for national security and economic competitiveness;

- (ii) to support workforce development for such facility; or
- (iii) to support site development for such facility.

(B) RETURN OF FUNDS.—A State awarded a grant under paragraph (1) shall return any unused funds to the Treasury of the United States on an agreed-upon timeframe determined by the Secretary prior to issuing the funds.

(C) RECOVERY OF CERTAIN FUNDS.—If a microelectronics entity receiving grant funds under this subsection engages in increased levels of joint research and development, technology licensing or transfer, or investment in-

1 volving sensitive technologies with entities
2 under the foreign ownership, control, or influence
3 (FOCI) of the Government of the People's
4 Republic of China or other foreign adversary
5 during the period of the grant, as determined
6 by the Secretary as part of a periodic review of
7 whether a microelectronics entity participating
8 in the program specified in this subsection is
9 under foreign ownership, control, or influence,
10 the Secretary shall recover the amounts pro-
11 vided by the Secretary under this subsection.

12 (5) PROHIBITION.—If pursuant to the periodic
13 review of foreign ownership, control, or influence
14 specified in paragraph (4)(C), the Secretary deter-
15 mines that a microelectronics entity is under the for-
16 ign ownership, control, or influence of the Govern-
17 ment of the People's Republic of China or other for-
18 ign adversary during the period of the grant, such
19 entity shall be prohibited from participating in the
20 program specified in this subsection.

21 (6) NONRELOCATION BETWEEN STATES.—

22 (A) PROHIBITION.—A State may not use
23 any amount of a grant awarded under this sub-
24 section to induce the relocation or the move-

1 ment of existing jobs from one State to another
2 State in competition for those jobs.

3 (B) REMEDIES.—In the event that the
4 Secretary determines an amount of a grant
5 awarded to a State under this subsection was
6 used in violation of subparagraph (A), the Sec-
7 retary may pursue appropriate enforcement ac-
8 tions, including—

- 9 (i) suspension of disbursements of the
10 grant awarded; and
11 (ii) termination of the grant awarded,
12 which may include the establishment of a
13 debt requiring the recipient of the grant to
14 reimburse the amount of the grant.

15 (7) IMPLEMENTATION.—The Secretary shall
16 carry out this section acting through the Director of
17 the National Institute of Standards and Technology.

18 (8) REPORTS AND NOTICES.—

19 (A) SECRETARY OF COMMERCE.—

20 (i) REPORT ON IMPLEMENTATION
21 PLAN.—Not later than 90 days after the
22 date of the enactment of this Act, the Sec-
23 retary shall submit to Congress a report on
24 the plans of the Secretary to carry out the
25 program required by paragraph (1).

1 (ii) NOTICE OF PENDING AWARD.—

18 (B) COMPTROLLER GENERAL OF THE
19 UNITED STATES.—

1 United States shall submit to Congress a
2 report on the activities carried out under
3 this subsection during the previous year.

4 (ii) CONTENTS.—Each report sub-
5 mitted under clause (i) shall include, at a
6 minimum, assessments of the following:

7 (I) How the program is being
8 carried out and how recipients of
9 grants are being selected under the
10 program.

11 (II) How other Federal programs
12 are leveraged for manufacturing, re-
13 search, and training to complement
14 the grants awarded to States under
15 this subsection.

16 (III) Outcomes of projects sup-
17 ported by grants under this sub-
18 section, including the construction, ex-
19 pansion, or modernization of a micro-
20 electronics fabrication, assembly, test,
21 advanced packaging, or advanced re-
22 search and development facilities, re-
23 search and development, workforce
24 training, employment, wages, and hir-

4 There is authorized to be appropriated to carry out
5 this subsection \$15,000,000,000 for fiscal year
6 2021, with such amount to remain available for such
7 purpose until September 30, 2031.

8 (b) CREATION, EXPANSION, OR MODERNIZATION OF
9 MICROELECTRONICS MANUFACTURING FACILITIES AND
10 CAPABILITIES FOR NATIONAL SECURITY NEEDS.—

(1) INCENTIVES AUTHORIZED.—The Secretary of Defense and the Director of National Intelligence, in consultation with the Secretary of Commerce, may jointly enter into arrangements with private sector entities or consortia thereof to provide incentives for the creation, expansion, or modernization of one or more commercially competitive and sustainable microelectronics manufacturing or advanced research and development facilities capable of producing measurably secure and specialized microelectronics for use by the Department of Defense, the intelligence community, critical infrastructure sectors of the United States economy, and other national security applications.

1 (2) COMMERCIAL MANUFACTURING.—A facility
2 constructed, expanded, or modernized with an incen-
3 tive provided under paragraph (1) may—

4 (A) be principally oriented toward commer-
5 cial manufacturing; or

6 (B) devote surplus manufacturing capacity
7 to the production of commercial microelec-
8 tronics.

9 (3) RISK MITIGATION REQUIREMENTS.—A facil-
10 ity constructed, expanded, or modernized with an in-
11 centive provided under paragraph (1), or the compo-
12 nents thereof, shall—

13 (A) have the potential to perform fabrica-
14 tion, assembly, package, test, or advanced re-
15 search and development functions for classified
16 and export-controlled microelectronics;

17 (B) include management processes to iden-
18 tify and mitigate supply chain security risks;
19 and

20 (C) be able to produce microelectronics
21 consistent with applicable trusted supply chain
22 and operational security standards established
23 under section 224 of the National Defense Au-
24 thorization Act for Fiscal Year 2020 (Public
25 Law 116–92).

1 (4) NATIONAL SECURITY REQUIREMENTS.—In
2 the provision of incentives under paragraph (1), the
3 Secretary of Defense and the Director of National
4 Intelligence shall jointly give preference to private
5 sector entities and consortia that—

6 (A) have participated in previous programs
7 and projects of the Department of Defense or
8 the Office of the Director of National Intel-
9 ligence, including—

10 (i) the Trusted Integrated Circuit pro-
11 gram of the Intelligence Advanced Re-
12 search Projects Activity;

13 (ii) trusted and assured microelec-
14 tronics projects, as administered by the
15 Department of Defense; or

16 (iii) the Electronics Resurgence Initia-
17 tive (ERI) program of the Defense Ad-
18 vanced Research Projects Agency;

19 (B) have demonstrated an ongoing com-
20 mitment to performing contracts for the De-
21 partment of Defense and the intelligence com-
22 munity;

23 (C) are approved by the Defense Counter-
24 intelligence and Security Agency or the Office
25 of the Director of National Intelligence as pre-

1 senting an acceptable security risk, taking into
2 account supply chain assurance vulnerabilities,
3 counterintelligence risks, and any risks pre-
4 sented by companies whose owners are located
5 outside the United States; and

6 (D) are evaluated periodically for foreign
7 ownership, control, or influence, consistent with
8 the determinations in paragraphs (4)(C) and
9 (5) of subsection (a).

10 (5) USE OF INCENTIVES.—Incentives may be
11 provided under paragraph (1) for the construction,
12 expansion, or modernization of a facility that was
13 constructed, expanded, or modernized with funds
14 from a grant awarded under subsection (a).

15 (6) NONTRADITIONAL DEFENSE CONTRACTORS
16 AND COMMERCIAL ENTITIES.—The arrangements
17 entered into under paragraph (1) shall be in the
18 form the Secretary of Defense and the Director of
19 National Intelligence determine to be appropriate to
20 encourage industry participation of nontraditional
21 defense contractors or commercial entities and may
22 include a contract, a grant, a cooperative agreement,
23 a commercial agreement, the use of other trans-
24 action authority under section 2371 of title 10,
25 United States Code, or another such arrangement.

1 (7) REPORTS.—

2 (A) REPORT BY SECRETARY OF DEFENSE
3 AND DIRECTOR OF NATIONAL INTELLIGENCE.—

4 Not later than 90 days after the date of the en-
5 actment of this Act, the Secretary of Defense
6 and the Director of National Intelligence shall
7 jointly submit to Congress a report on the plans
8 of the Secretary and the Director to provide in-
9 centives under paragraph (1).

10 (B) BIENNIAL REPORTS BY COMPTROLLER
11 GENERAL OF THE UNITED STATES.—Not later
12 than 1 year after the date on which the Sec-
13 retary submits the report required by subpara-
14 graph (A) and not less frequently than once
15 every 2 years thereafter, the Comptroller Gen-
16 eral of the United States shall submit to Con-
17 gress a report on the activities carried out
18 under this subsection.

19 (8) AUTHORIZATION OF APPROPRIATIONS.—
20 There is authorized to be appropriated to carry out
21 this subsection \$5,000,000,000 for fiscal year 2021,
22 with such amount to remain available for such pur-
23 pose until September 30, 2031.

1 (c) ADDITIONAL AMOUNTS FOR ENSURING THE FU-
2 TURE OF UNITED STATES LEADERSHIP IN MICROELEC-
3 TRONICS.—

4 (1) AUTHORIZATION OF APPROPRIATIONS.—

5 There is authorized to be appropriated
6 \$2,000,000,000 for fiscal year 2021, with such
7 amount to remain available until September 30,
8 2031, to expand the Electronics Resurgence Initiative
9 of the Defense Advanced Research Projects Agency to develop advanced disruptive microelectronics technology, including research and development to enable production at a volume required to sustain a robust domestic microelectronics industry and mitigate parts obsolescence.

15 (2) AUTHORIZATION OF APPROPRIATIONS.—

16 There is authorized to be appropriated to carry out
17 microelectronics research at the National Science Foundation \$1,500,000,000 for fiscal year 2021,
18 with such amount to remain available for such purpose until September 30, 2031.

21 (3) AUTHORIZATION OF APPROPRIATIONS.—

22 There is authorized to be appropriated to carry out
23 microelectronics research at the Department of Energy \$1,250,000,000 for fiscal year 2021, with such

1 amount to remain available for such purpose until
2 September 30, 2031.

3 (4) AUTHORIZATION OF APPROPRIATIONS.—
4 There is authorized to be appropriated to carry out
5 microelectronics research at the National Institute of
6 Standards and Technology \$250,000,000 for fiscal
7 year 2021, with such amount to remain available for
8 such purpose until September 30, 2031.

9 (5) SUPPLEMENT, NOT SUPPLANT.—The
10 amounts authorized to be appropriated under para-
11 graphs (1) through (4) shall supplement and not
12 supplant amounts already appropriated to carry out
13 the purposes described in such paragraphs.

14 (6) DOMESTIC PRODUCTION REQUIREMENTS.—
15 The heads of executive agencies receiving funding
16 under this section shall develop policies to require
17 domestic production, to the extent possible, for any
18 intellectual property resulting from microelectronics
19 research and development conducted as a result of
20 these funds and domestic control requirements to
21 protect any such intellectual property from foreign
22 adversaries.

23 (7) SENSE OF CONGRESS.—Congress supports
24 and encourages efforts by the heads of executive
25 agencies receiving funding under this subsection to

1 co-invest in industry-led microelectronics investment
2 consortiums to increase private capital investment in
3 the domestic microelectronics industry.

4 (d) NATIONAL MICROELECTRONICS RESEARCH AND
5 DEVELOPMENT PLAN.—

6 (1) IN GENERAL.—The President shall establish
7 a standing subcommittee of the President's Office of
8 Science and Technology's National Science and
9 Technology Council for interagency efforts relating
10 to microelectronics policy.

11 (2) NATIONAL MICROELECTRONICS RESEARCH
12 PLAN.—

13 (A) IN GENERAL.—The subcommittee es-
14 tablished under paragraph (1) shall develop a
15 national microelectronics research and develop-
16 ment plan to guide and coordinate funding for
17 breakthroughs in next-generation microelec-
18 tronics research and technology, strengthen the
19 domestic microelectronics workforce, and en-
20 courage collaboration between government, in-
21 dustry, and academia.

22 (B) UPDATES.—Not less frequently than
23 once each year, the subcommittee established
24 under paragraph (1) shall update the plan de-

1 veloped under subparagraph (A) of this para-
2 graph.

3 (e) INDUSTRY ADVISORY COMMITTEE.—The Presi-
4 dent shall establish a standing subcommittee of the Presi-
5 dent's Council of Advisors on Science and Technology to
6 advise the United States Government on matters relating
7 to microelectronics policy.

8 (f) MULTILATERAL EXPORT CONTROL PLAN.—Not
9 later than 180 days after the date of the enactment of
10 this Act, the Secretary of State, the Secretary of the
11 Treasury, and the Secretary of Commerce, in consultation
12 with the Director of National Intelligence, the Secretary
13 of Homeland Security, the Secretary of Defense, and the
14 Secretary of Energy, shall jointly develop and submit to
15 Congress a plan to coordinate with foreign government
16 partners on establishing common microelectronics export
17 control and foreign direct investment screening measures
18 to align with national and multilateral security priorities.

19 (g) PROHIBITION RELATING TO FOREIGN ADVER-
20 SARIES.—None of the funds appropriated pursuant to an
21 authorization in this section may be provided to an enti-
22 ty—

23 (1) under the foreign ownership, control, or in-
24 fluence of the Government of the People's Republic

1 of China or the Chinese Communist Party, or other
2 foreign adversary; or

3 (2) determined to have beneficial ownership
4 from foreign individuals subject to the jurisdiction,
5 direction, or influence of foreign adversaries.

6 (h) REQUIREMENTS FOR SOURCING FROM DOMESTIC
7 MICROELECTRONICS DESIGN AND FOUNDRY SERVICES.—

8 (1) REQUIREMENTS REQUIRED.—Not later
9 than 1 year after the date of the enactment of this
10 Act, the Secretary of Defense shall establish require-
11 ments, and a timeline for enforcement of such re-
12 quirements, to the extent possible, for domestic
13 sourcing for microelectronics design and foundry
14 services by programs, contractors, subcontractors,
15 and other recipients of funding from the Department
16 of Defense.

17 (2) PROCESSES FOR WAIVERS.—The require-
18 ments established under paragraph (1) shall include
19 processes to permit waivers for specific contracts or
20 transactions for domestic sourcing requirements
21 based on cost, availability, severity of technical and
22 mission requirements, emergency requirements and
23 operational needs, other legal or international treaty
24 obligations, or other factors.

(3) UPDATES.—Not less frequently than once each year, the Secretary shall—

(A) update the requirements and timelines established under paragraph (1) and the processes under paragraph (2); and

(B) submit to Congress a report on the up-dates made under subparagraph (A).

8 (i) DEFINITIONS.—In this section:

(3) FOREIGN OWNERSHIP, CONTROL, OR INFLUENCE.—The term “foreign ownership, control, or influence” has the meaning given such term in section 847 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

1 meaning given such term in section 3 of the Na-
2 tional Security Act of 1947 (50 U.S.C. 3003).

○